



A world powered by **clean energy**

FSXSOLUTIONS



XSERIES

AIR FILTRATION for

- General Purpose Air
- High Quality Air
- Critical Applications



Compressed Air Filters



Products Designed for Compressed Air

- Practical solutions developed from over 50 years of experience
- Full range of products for one-stop shopping
- Proven quality on a global scale

Exceptional Technical Support

- Flexible, fully trained technical team
- Expert advice and simple solutions for the right product, every time

Customers First

- Direct line, live support
- Uncomplicated visual catalogue
- Readily available aftermarket service and support

Expert Problem Solvers on a Global Scale

Founded in 1967, Xebec's experience in adsorption technology is the foundation of all of Xebec's systems. To date, Xebec has supplied more than 9000 adsorption systems to more than 1500 customers worldwide, built to ASME code and, as required, National Board certified with Canadian Registration (CRN) approval. With major installations throughout North America, China, Russia, Australia, South America, Indonesia and the Middle East, Xebec offers worldwide service and support through a dedicated team providing design knowledge, installation expertise, hardware development, aftermarket parts and on site / on demand servicing for end-to-end solutions.





Air Contaminants



Water Contaminants



Oil Contaminants

The Application

Compressed Air

It's used for a wide variety of needs as a safe, reliable power source. Unlike gas, water and electricity, compressed air is generated on site so the user takes on the serious responsibility for air quality and operational cost. Untreated compressed air is the major contributor to poor operational performance and health and safety issues. Therefore, companies must recognize and respond to increasingly critical needs for best in class compressed air purification.

The Problem

Contamination

Most compressed air systems are susceptible to

- solid particulates like atmospheric dust, micro-organisms, rust & pipe scale
- water vapour, condensed liquid water and water aerosols
- oil vapour, liquid oil and oil aerosols (fine mist)

Result

Corrosion in storage vessels and overall air distribution system; blocked valves, cylinders & motors; more frequent desiccant changes for adsorption dryers; product contamination; environmental non-compliance; inefficient production processes leading to increased cost and spoiled, damaged and reworked products.

The Solution

Treatment

Compressed air must be treated prior to entry into the distribution system to protect equipment, and at point of use to address the specific application and level of air quality required. System engineers use ISO 8573-1:2010 as the standard – a simple method that classifies the level of air purity. Filters are specially designed and tested to meet these rigorous standards so system operators can choose the appropriate quality that addresses their purification needs.

INTERNATIONAL STANDARDS ORGANIZATION (ISO)

ISO represents the national standard institutes of 159 countries. It is the body that determines the accepted international standards for compressed air quality and testing. There are two standards currently in use for filters – ISO 8573 and ISO 12500.

- ISO 8573 has 9 parts. Part 1 is called ISO 8573-1:2010 and is used to specify the purity of compressed air required at a particular point in a compressed air system. Parts 2 to 10 are used for testing purposes.
- ISO 12500 is used to verify and to benchmark performance of compressed air purification equipment.

ISO 8573-1 specifies the amount of allowable contamination in each category - solid particulate, water and oil – by class. The resulting three digit code is used by compressor manufacturers to classify the required purity level of compressed air for specific applications.

Understanding Compressed Air Purity Standards

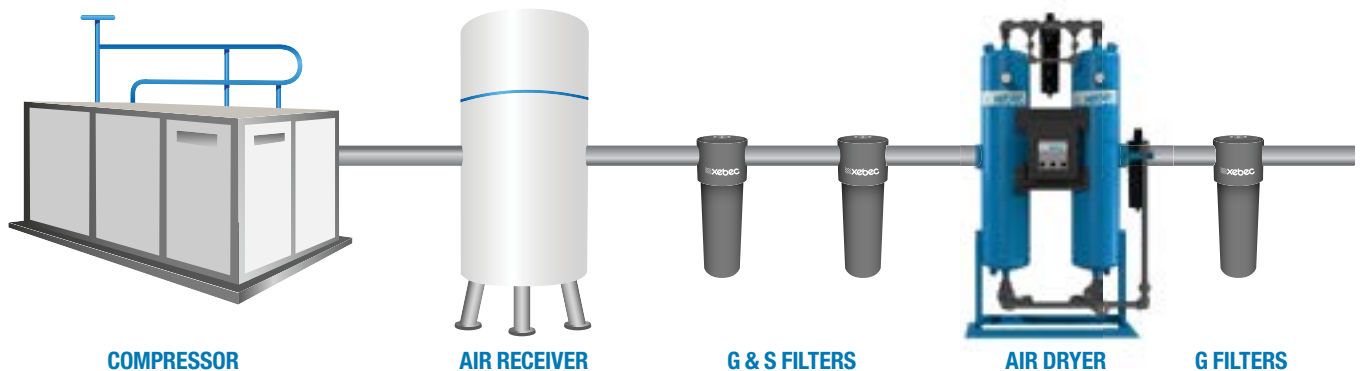
Example: Air Purity Level Required for Machine Tooling: ISO Code 8573-1:2010 - 3/5/4

- The first number refers to particulate contaminants – class 3 means that in each cubic meter of compressed air, the particulate count should not exceed 90,000 particles in the 0.5 to 1 micron size range, and 1000 particles in the 1 to 5 micron size range.
- The second number refers to water contaminants – a class 5 pressure dewpoint (PDP) of 45°F (7°C) is required, and no liquid water is allowed.
- The third number specifies level of oil contaminants – class 4 means that in each cubic meter of compressed air, not more than 5 mg of oil is allowed. This is a total for liquid, aerosol and vapour.

1	Particulate			Water			Oil		
	Solid Particles & Dust			Humidity & Liquid Water			Liquid, Vapour, Aerosol Oil		
	Particles per m ³ , by size			Vapour Pressure Dewpoint			Total Concentration		
Class	0.1 to 0.5 Microns	0.5 to 1.0 Microns	1 to 5 Microns	Class	Degrees °C	Degrees °F	Class	Mg/m ³	Ppm w/w
0	As specified			0	As specified		0	As specified	
1	≤ 20,000	≤ 400	≤ 10	1	≤ -70	≤ -94	1	≤ 0.01	≤ 0.008
2	≤ 400,000	≤ 6,000	≤ 100	2	≤ -40	≤ -40	2	≤ 0.1	≤ 0.08
3	Not specified	≤ 90,000	≤ 1,000	3	≤ -20	≤ -4	3	≤ 1.0	≤ 0.8
4	Not specified	Not specified	≤ 10,000	4	≤ 3	≤ 38	4	≤ 5.0	≤ 4.0
5	Not specified	Not specified	≤ 100,000	5	≤ 7	≤ 45	X	≤ 5.0	≤ 4.0
	Particle Concentration (mg/m ³)			6	≤ 10	≤ 50			
6	0 to 5			Liquid Water Concentration (g/m ³)					
7	5 to 10			7	≤ 0.5				
X	>10			8	0.5 to 5				
				9	5 to 10				
				X	>10				

Compressor Room

The quality of air required throughout a typical compressed air system can vary. Compressed air must be treated **prior** to entry into the distribution system to protect equipment and **at point of use** to address the specific application and level of air quality required.



X SERIES



Overview

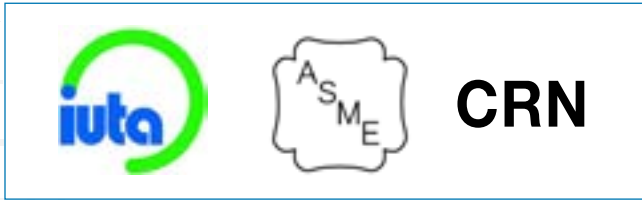
Best in class air filters look like this

Surface Protection

The high-grade, cast aluminum filter housings (XL and XM series), are finished with an impact and abrasion-proof powder coating on the outer side. High pressure carbon steel housings (XH series) are manufactured by means of iron phosphate passivation and have either a nickel-coated or a nitriding finish. This multi-layer surface protection ensures high resistance and a long service life.

Conformity with International Standards

The X Series has been performance-validated according to ISO 8573 quality standards and test methods 12500 by IUTA, an independent verification body. All filters have been tested to ASME and CRN standards.



Simple Design. Easy Maintenance

Xebec filters have lugs in the lower filter part to which the filter element is securely mounted, fastened and sealed when the housing is screwed tight. That eliminates the need for a tie rod, which allows the filter to be located only a few inches above ground level. A mechanical end stop prevents the housing thread from being overstressed and ensures easy opening of the filter housing, even after prolonged operating periods. A hex-nut at the bottom of the XL and XM bowl has been added for extra help. The filter element holder has guide paths so the filter elements automatically lock in when being installed.



An Optimized Accessories Range

Differential Pressure Gauges, Manual & Automatic Condensate Drains, Oil Indicators, Oil/Water Separators, & Assembly Kit. Custom accessories are available on request.



Filter Media Designed For Compressed Air

High quality compressed air filtration starts with selecting the correct filter media. Xebec uses superior-quality filter media with a new, hybrid technology. Our elements stop the perpetual discussion about the use of filter media with or without binders because they are layered with both types, tailored to the filtration task. This neutralizes the inherent disadvantages and, as a result, retains the advantages of both types. The fine filter media is protected on both sides using a supporting fabric to increase both the stability and reliability.

Pleated Filter Elements

Pleated filter elements provide significantly greater filtration area than non-pleated. The higher filter area provides more void space for holding contaminants which reduces the differential pressure caused by retention of solid particles. The service life of the filter element increases proportionally which results in operating and maintenance cost savings.

Incorporated Drainage Media

The filter and drainage media are supported between two stainless steel supporting cylinders, eliminating any potential detachment of the filter media. The drainage media is located inside the filter element, eliminating potential handling damage. The stainless steel cylinders have big, diamond-shaped openings for optimum flow conditions. Compared to punch-hole versions, their contribution to differential pressure is much lower and they are much more environmentally friendly because they are made from expanded sheet metal, i.e. without metal scrap.

Two-stage Dry Type Separation

During dry-type separation with out-to-inside flow through the filter elements, the drainage media functions as a pre-filter stage, preventing coarse contaminants from entering the fine filter media. As a result, the differential pressure caused by contaminants is reduced and the service life of the filter is extended. As an additional advantage, the filter elements can also be used for wet type filtration.

Abrasion-free Activated Carbon Filter with 100% Activated Carbon

Both the filter element type and the cartridge type contain pure activated carbon granulate. The increased filling quantities contribute to a high separation performance and a long service life. Both the elements and the cartridges have an integrated general purpose filter element which significantly reduces the abrasion particles of the activated carbon. As a result, downstream dust filtration is not required, reducing installation, operation and maintenance costs.



Type Of Filtration

Elements come with polymer endcaps but are available with aluminum or stainless steel end caps.

Filtration grade	WS	C	G	F	SF	AC	AAC	ACC	MSC
Designation	Water Separator	Coarse, Pre-Filter	General Purpose Filter particulate & coalescing	Fine Filter particulate & coalescing	Super Fine Filter	Odour Removal Activated Carbon	Activated Alumina Cartridge	Activated Carbon Cartridge	Molecular Sieve Cartridge
Purity Class acc to ISO 8573-1	- / 8 / -	6 / - / 4	2 / - / 2	1 / - / 1	1 / - / 0-1	1 / - / 0-1	1 / - / 0-1	1 / - / 0-1	1 / 3 / 1
Performance Specs	>98% >10µ (microns) separation (droplets and big particles)	99.99% 3µ (microns) separation of coarse particles & reduction of liquid particles	99.9999% 1µ (microns) separation of fine particles ≤0,1 mg/m ³ residual oil content (liquid phase)	99.9999% 0,1µ (microns) separation of fine particles ≤0,01 mg/m ³ residual oil content (liquid phase)	99.99999% 0,01µ (microns) separation of finest particles ≤0,01 mg/m ³ residual oil content (liquid phase)	- <0,005 mg/m ³ Residual oil content (gas phase)	Application dependent	- <0,005 mg/m ³ Residual oil content (gas phase)	Application dependent
Type of Filtration	Water separation	Wet & dry type	Wet & dry type	Wet & dry type	Wet & dry type	Oil vapour adsorption	Water vapour adsorption	Oil vapour adsorption	Water vapour adsorption
Application	Removal of large amounts of liquid.	Removal of large amounts of solid or liquid coarse contaminants.	Removal of medium amounts of solid or liquid fine contaminants.	Removal of small amounts of solid or liquid of finer contaminants. Recommend combining with upstream C or G element in the event of increased amounts of contaminant.	Removal of small amounts of solid or liquid of finest contaminants. Recommend combining with upstream G or F element in the event of increased amounts of contaminants.	Removal of small amounts of gaseous contaminants, in particular, oil vapour. Upstream F or SF element required. No downstream particulate filter required as it comes with integrated G element.	Removal of small amounts of water vapour.	Removal of small amounts of gaseous contaminants, in particular, oil vapour for low volume flow rates. Upstream F or SF element required. No downstream particulate filter required as it comes with integrated G element.	Removal of small amounts of water vapour.

Filter Element Size	Dimensions		Flow Capacity*		For Filter Housing		
	inches	mm	scfm	Nm ³ /h			
XE103	Ø=1 ½; h=2	Ø=42; h=53	30	50	-	-	XH1
XE105	Ø=2; h=2 ¼	Ø=51; h=59	40	70	XL1	XM1	-
XE107	Ø=2; h=3	Ø=51; h=75	60	100	XL2	XM2	XH2
XE114	Ø=2; h=5 ½	Ø=51; h=144	90	150	XL3 / XL4	XM3	XH3 / XH4
XE201	Ø=3; h=4 ½	Ø=75; h=118	150	250	XL5	-	XH5
XE202	Ø=3; h=8 ½	Ø=75; h=218	300	450	XL6	XM4	XH6
XE203	Ø=3; h=12 ½	Ø=75; h=318	410	700	XL7	XM5	XH7
XE205	Ø=3; h=20	Ø=75; h=508	630	1050	XL8	XM6	-
XE305	Ø=3 ½; h=20	Ø=92; h=506	820	1400	XL9	XM7	-
XE307	Ø=3 ½; h=30	Ø=92; h=760	1240	2100	XL10	XM8	-
XE506	Ø=5 ½; h=23 ¾	Ø=140; h=605	1650	2800	XL11	XM9	-
XE507	Ø=5 ½; h=30	Ø=140; h=755	2060	3500	XL12	XM10	-

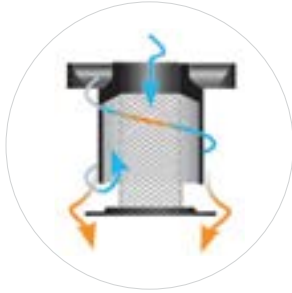
*Refers to 1 bar(a) and 68°F / 20°C at 100 psig/7 barg

TO ORDER YOUR ELEMENTS

ORDERING EXAMPLE: **XE 203 C A**

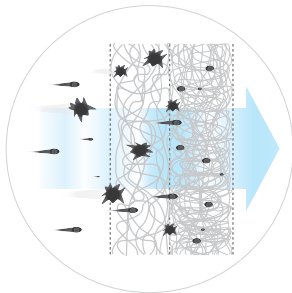
Coarse, pre-filter element for filter model XL7, with aluminum end caps

XEBEC	Series	Filter Element Size	Media Grade (microns)	End Cap
X	E (Element)	103	WS	default: P (polymer)
		105	C (3µ)	A (aluminum)
		107	G (1µ)	S (stainless steel)
		114	F (0,1µ)	
		114	SF (0,01µ)	
		201	AC	
		202	AAC	
		203	ACC	
		205	MSC	
		305		
		307		
		506		
		507		



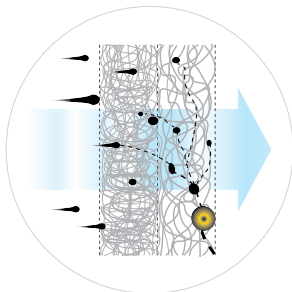
Water Separation

Large, “heavy”, slow amounts of liquid from a compressed air flow are separated by means of gravitational forces, centrifugal forces, inertial effects, etc. The differential pressure is constant and a high separation efficiency is guaranteed over the whole specified flow rate range.



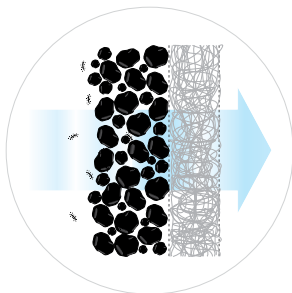
Dry Type Filtration

Solid contaminants are separated from the compressed air system. The solids contact the fibers of the filter media where they remain. A coarse and a fine coarse media filter protect the fine filter media, increasing the service life. The differential pressure (dry) increases with an increasing amount of contaminant. The elements can be operated from inside to out or vice versa. The preferred direction of flow is toward the finer filter fibers, i.e. from out-to-in.



Wet Type Filtration

Liquid contaminants from the compressed air flow are separated using a fine multi-layer filter media in combination with a drainage media (coalescing filter). The liquid contaminants contact the fibers of the fine filter media, move along the fibers due to the compressed air flow and form larger droplets when they are merged (coalescing effect). The droplets are absorbed by the drainage media, discharged to the filter element bottom due to gravitational forces, and drop off the filter element. Theoretically, the differential pressure (wet) is constant. However, it rises as the filter element is continuously loaded with liquid and solid contaminants. The direction of flow is toward the drainage media, i.e. from in-to-out.



Oil Vapour Adsorption

Compressed air flow oil vapours are absorbed by activated carbon. The air becomes virtually oil-free which cannot condense into a liquid any more. There is often a filter media downstream of the activated carbon in order to eliminate activated carbon abrasion particles (abrasion-free activated carbon filter). The differential pressure (dry) is constant. The direction of flow is always toward the media, i.e. from in-to-out. Liquid oil or water would dramatically reduce the retention capacity of the activated carbon for oil vapour and should, therefore, be separated in advance using appropriate grade filters.










XL SERIES

LOW PRESSURE. HIGH PERFORMANCE.



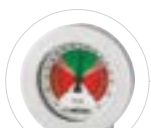

Pressure	290 psig / 20 barg
Volume Flow Range	29 to 1412 scfm – 50 to 2400 Nm³/h
Port Size	¼" to 3" NPT

The XL series of low pressure filters are used to remove solid, liquid and, when using activated carbon cartridges, gaseous contaminants from compressed air flows. In addition to liquids and dust, these filters virtually eliminate all oil droplets and finest dust particles from the compressed air.



Filter Elements

- WS**  Water Separator Element
- C**  3µm Coarse Pre-filter Element
- G**  1µm General Purpose Element
- F**  0,1µm Fine Element
- SF**  0,01µm Super-fine Element
- AC**  Activated Carbon Element
- AAC**  Activated Alumina Cartridge
- MSC**  Molecular Sieve Cartridge
- ACC**  Activated Carbon Cartridge

Gauges

-  **G1**
-  **G2**
-  **G3**
-  **I1**

Manual Drains

-  **D1**
-  **D5**



Ask us about other available accessories.

To Order Your XL Filters

ORDERING EXAMPLE: **XL** **A** **N** **5** **SF** **P** **G1** **D5** **N**

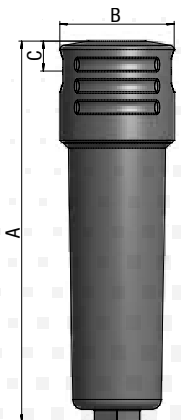
Low pressure air filter, 3/4" NPT, flow 106 scfm, superfine media grade, DP gauge, automatic internal float drain.

XEBEC	Series	Application	Port Connection	Filter Model	Media Grade (microns)	End Cap	Gauge	Drain	Accessories
X	L (Low)	A (Air)	N (NPT)	1	WS	P (Polymer) default Max. Temp. 176°F / 80°C	N (None) Default	N (None) Default	N (None) Default
				2	C (3µ)	A (aluminum) Max. Temp. 248°F / 120°C	G1 (Magnetic Differential Manometer)	D1 (Manual valve)	AK (assembly kit)
				3	G (1µ)	S (stainless steel) Max. Temp. 248°F / 120°C	G2 (Magnetic Differential Manometer w/alarm)	D3 (Manual ball valve)	
				4	F (0,1µ)		G3 (Differential pressure drop indicator)	D5 (Automatic internal float drain)	
				5	SF (0,01µ)		I1 (Oil Indicator)	D6 (Automatic condensate drain)	
				6	AC			D7 (Electronic condensate drain)	
				7	AAC				
				8	ACC				
				9	MSC				
				10					
				11					
				12					

Use this table to find your filter model.

XL Filter Model	NPT Port Size (in)	Filter Element	AIR FLOW CAPACITY ¹		Dimensions						Volume		Mass	
					A		B		C		gals	liters	lbs	kgs
			scfm	Nm ³ /h	in	mm	in	mm	in	mm				
1	1/4	XE105	29	50	7 3/4	197	3 1/4	80	3/4	21	0.13	0,5	1.5	0,7
2	3/8	XE107	41	70	7 3/4	197	3 1/4	80	3/4	21	0.13	0,5	1.5	0,7
3	1/2	XE114	59	100	10 1/2	267	3 1/4	80	3/4	21	0.18	0,7	1.8	0,8
4	3/4	XE114	59	100	10 1/2	267	3 1/4	80	3/4	21	0.18	0,7	1.8	0,8
5	3/4	XE201	106	180	10 1/4	259	4 1/2	117	1 1/4	33	0.42	1,6	4.0	1,8
6	1	XE202	177	300	14	359	4 1/2	117	1 1/4	33	0.55	2,1	5.0	2,2
7	1 1/2	XE203	277	470	18	459	4 1/2	117	1 1/4	33	0.71	2,7	5.5	2,5
8	1 1/2	XE205	412	700	25 1/4	639	4 1/2	117	1 1/4	33	1.0	3,8	6.8	3,1
9	2	XE305	553	940	27 1/2	700	5 1/2	140	2	50	1.6	6,1	12.1	5,5
10	2	XE307	853	1450	37 1/4	950	5 1/2	140	2	50	2.2	8,4	16.3	7,4
11	2 1/2	XE506	1142	1940	32	811	8 1/2	217	2 3/4	69	4.46	16,9	30.0	13,6
12	3	XE507	1412	2400	39 1/2	1003	8 1/2	217	2 3/4	69	5.52	20,9	37.3	16,9

¹flow capacity refers to 1 bar(a) and 68°F/20°C at 100 psig/7 barg.



Flow Correction Factors

To select the right filter, use the following formulas and the nominal flow figures from the filter model table.

For calculating Actual Flow Capacity: $V_a = V_n * C_{fp}$

For calculating Nominal Flow Capacity: $V_n = V_a / C_{fp}$

Operating Pressure

psig	44	72	100	116	131	145	160	174	189	203	218	232	250	265	290	232	247	261	276	290
barg	3	5	7	8	9	10	11	12	13	14	15	16	17	18	20	16	17	18	19	20
C _{fp}	0.50	0.80	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.37	2.61	0.81	0.85	0.90	0.96	1










XM SERIES

MEDIUM PRESSURE. AMAZING PERFORMANCE.

Pressure	725 psig / 50 barg
Volume Flow Range	29 to 1412 scfm / 50 to 2400 Nm³/h
Port Size	1/2" to 3" NPT

The XM series of medium pressure filters are used to remove solid, liquid and, when using activated carbon cartridges, gaseous contaminants from compressed air flows. In addition to liquids and dust, these filters virtually eliminate all oil droplets and finest dust particles from the compressed air. With AC or ACC grade elements, oil aerosols and odours will be removed.

Filter Elements

- WS**  Water Separator Element
- C**  3µm Coarse Pre-filter Element
- G**  1µm General Purpose Element
- F**  0,1µm Fine Element
- SF**  0,01µm Super-fine Element
- AC**  Activated Carbon Element
- AAC**  Activated Alumina Cartridge
- MSC**  Molecular Sieve Cartridge
- ACC**  Activated Carbon Cartridge



Ask us about other available accessories.

To Order Your Filter Model:

ORDERING EXAMPLE: **XMA N 1 G S G4 N N**

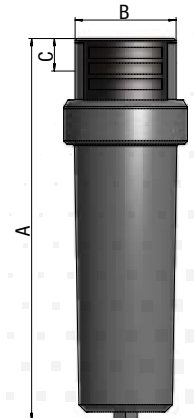
Medium pressure air filter, 1/2" NPT, flow 42 scfm, general purpose media grade with s/s endcaps, DPI.

XEBEC	Series	Application	Port Connection	Filter Model	Media Grade (microns)	End Cap	Gauge	Drain	Accessories
X	M (Med)	A (Air)	N (NPT)	1	WS	P (Polymer) default Max. Temp. 176°F / 80°C	N (None) Default	N (None) Default	N (None) Default
				2	C (3μ)	A (aluminum) Max. Temp. 248°F / 120°C	G4 (Differential Pressure Drop Indicator)	D3 (Manual ball valve)	
				3	G (1μ)	S (stainless steel) Max. Temp. 248°F / 120°C			
				4	F (0,1μ)				
				5	SF (0,01μ)				
				6	AC				
				7	AAC				
				8	ACC				
				9	MSC				
				10					

Use this table to find your filter model.

XM Filter Model	NPT Port Size (in)	Filter Element	AIR FLOW CAPACITY ¹		Dimensions						Volume		Mass	
					A		B		C		gals	liters	lbs	kgs
			scfm	Nm ³ /h	in	mm	in	mm	in	mm				
1	1/2	XE105	29	50	9 3/4	250	4	102	1 1/4	31	0.21	0,8	4.6	2,1
2	3/4	XE107	41	70	9 3/4	250	4	102	1 1/4	31	0.21	0,8	4.6	2,1
3	1	XE114	59	100	9 3/4	250	4	102	1 1/4	31	0.21	0,8	4.6	2,1
4	1 1/2	XE202	177	300	21	535	5 1/2	141	1 3/4	46	0.98	3,7	20.9	9,5
5	1 1/2	XE203	277	470	21	535	5 1/2	141	1 3/4	46	0.98	3,7	20.9	9,5
6	2	XE205	412	700	28 1/4	715	5 1/2	141	1 3/4	46	1.37	5,2	26.9	12,2
7	2	XE305	553	940	28 1/4	715	5 1/2	141	1 3/4	46	1.37	5,2	26.9	12,2
8	2	XE307	853	1450	37 1/4	945	5 1/2	141	1 3/4	46	2.09	7,9	34.2	15,5
9	3	XE506	1142	1940	33 3/4	847	7 3/4	198	2 3/4	70	4.41	16,7	67.0	30,4
10	3	XE507	1412	2400	39 3/4	1010	7 3/4	198	2 3/4	70	5.23	19,8	76.9	34,9

¹flow capacity refers to 1 bar(a) and 68°F/20°C at 100 psig/7 barg.



Flow Correction Factors

To select the right filter, use the following formulas and the nominal flow figures from the filter model table.

For calculating Actual Flow Capacity: $V_a = V_n * C_{fp}$

For calculating Nominal Flow Capacity: $V_n = V_a / C_{fp}$

Operating Pressure

psig	44	72	100	145	189	232	290	435	580	725
barg	3	5	7	10	13	16	20	30	40	50
C _{fp}	0.50	0.8	1.00	1.38	2	2.13	2.63	3.88	5.13	6.38










XH SERIES

HIGH PRESSURE. ULTIMATE PERFORMANCE.

Pressure	5800 psig / 400 barg
Volume Flow Range	18 to 277 scfm / 30 to 470 Nm³/h
Port Size	1/4" to 2" NPT

The XH series of high pressure filters are used to remove solid, liquid and, when using activated carbon cartridges, gaseous contaminants from compressed air flows. In addition to liquids and dust, these filters eliminate oil droplets and finest dust particles from the compressed air.

Filter Elements

- WS**  Water Separator Element
- C**  3µm Coarse Pre-filter Element
- G**  1µm General Purpose Element
- F**  0,1µm Fine Element
- SF**  0,01µm Super-fine Element
- AC**  Activated Carbon Element
- AAC**  Activated Alumina Cartridge
- MSC**  Molecular Sieve Cartridge
- ACC**  Activated Carbon Cartridge



Manual Needle Valve



Ask us about other available accessories.

To Order Your Filter Model:

ORDERING EXAMPLE: **XHA N 5 SF S N D4 N**

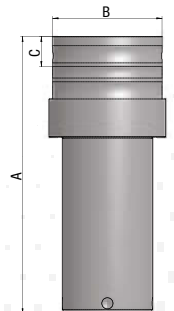
High pressure air filter, 1" NPT, flow 106 scfm, super fine media grade with SS endcaps and a needle valve.

XEBEC	Series	Application	Port Connection	Filter Model	Media Grade (microns)	End Cap	Gauge	Condensate Drain	Accessories
X	H (High)	C (CNG)	N (NPT) S (SAE)	1 2 3 4 5 6 7	WS C (3μ) G (1μ) F (0,1μ) SF (0,01μ) AC AAC ACC MSC	P (Polymer) default Max. Temp. 176°F / 80°C A (aluminum) Max. Temp. 248°F / 120°C S (stainless steel) Max. Temp. 248°F / 120°C	N (None) Default * * available on request	N (None) Default D4 (Manual needle valve)	N (None) Default

Use this table to find your filter model.

XH Filter Model	NPT Port Size (in)	Filter Element	AIR FLOW CAPACITY ¹		Dimensions						Volume		Mass	
					A		B		C					
			scfm	Nm ³ /h	in	mm	in	mm	in	mm	gals	liters	lbs	kgs
1	¼	XE103	18	30	6	155	3 ¼	83	2 ¾	70	0.04	0,16	13	5.9
2	⅜	XE107	41	70	7 ½	193	4	103	3 ¼	85	0.08	0,32	22.2	10.7
3	½	XE114	59	100	10 ¼	262	4	103	3 ¼	85	0.14	0,52	26	11.8
4	¾	XE114	59	100	10 ¼	262	4	103	3 ¼	85	0.14	0,53	26	11.8
5	1	XE201	106	180	11 ½	285	5 ¾	146	5	130	0.29	1,10	78.8	35.7
6	1 ½	XE202	177	300	15 ¼	385	7 ¼	146	5	130	0.40	1,78	90	40.8
7	2	XE203	277	470	19 ¾	494	7 ¼	182	5	150	0.75	3,35	145	65.8

¹flow capacity refers to 1 bar(a) and 68°F/20°C at 100 psig/7 barg.



Flow Correction Factors

To select the right filter, use the following formulas and the nominal flow figures from the filter model table.

For calculating Actual Flow Capacity: $V_a = V_n * C_{fp}$

For calculating Nominal Flow Capacity: $V_n = V_a / C_{fp}$

Operating Pressure

psig	100	362	1450	2175	2990	3625	4350	5075	5800
barg	7	50	100	150	200	250	300	350	400
C _{fp}	1.00	6.00	12.00	20.00	25.00	30.00	35.00	40.00	45.00

XT SERIES | XZ SERIES

PRECISION-ENGINEERED FLANGED FILTERS.

Pressure	260 psig / 18 barg
Volume Flow Range	850 to 17050 scfm / 1365 to 27365 Nm³/h
Port Size	2" to 12" Class 150 Flange
Standard Model	Carbon steel construction, Inline "T" or Freestanding "Z"

CUSTOM MODELS

- Larger Flows / Higher Pressures
- Stainless Steel Construction
- Vacuum Applications
- Activated Carbon Tower

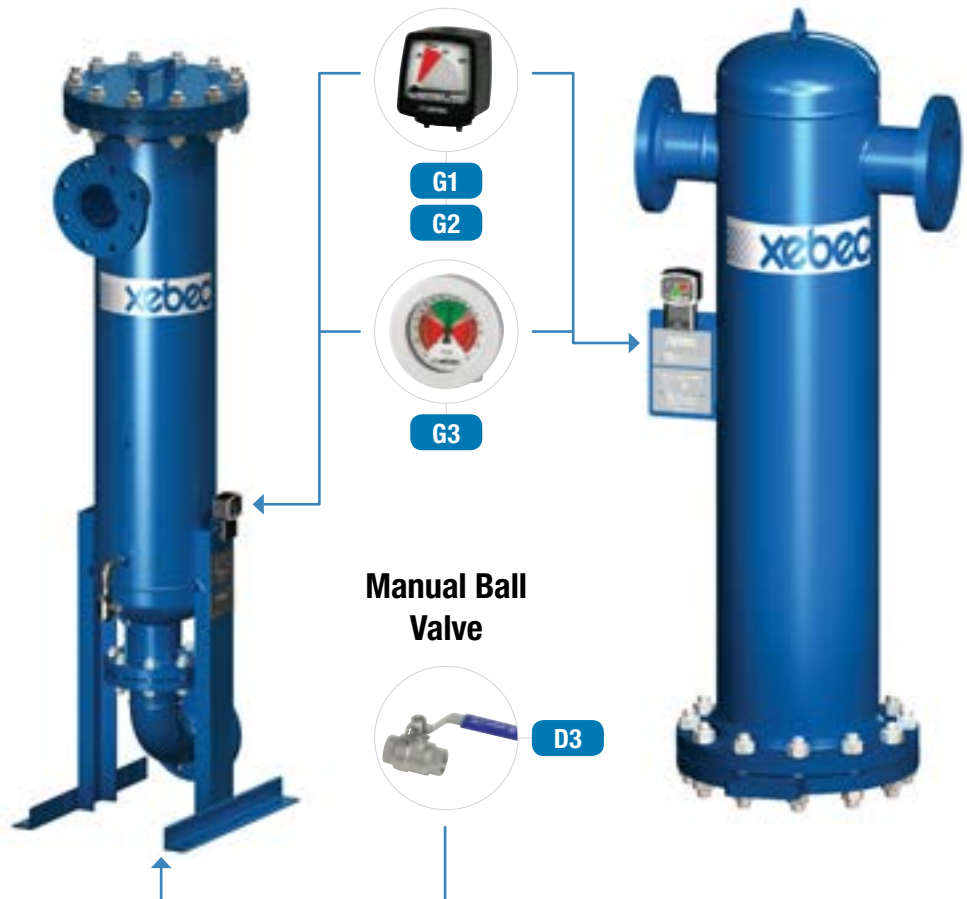
Filter Elements



Gauges



Manual Ball Valve



Ask us about other available accessories.

To Order Your Filter Model:

ORDERING EXAMPLE: **X** **T** **A** **F** **3** **SF** **5** **G1** **N**

Inline filter, 4" flange, 1700 scfm, super fine media grade with SS endcaps and gauge.

XEBEC	Series	Application	Port Connection	Filter Model	Media Grade (microns)	End Cap	Gauge	Condensate Drain
X	T (Inline)	A (Air)	F (flanged)	1	G (1µ)	P (Polymer) default Max. Temp. 176°F / 80°C	N (None) Default	N (None) Default
				2	SF (0,01µ)	A (aluminum) Max. Temp. 248°F / 120°C	G1 (Magnetic Differential Manometer)	D3 (Manual ball valve)
	Z (FStand)	3	AC	S (stainless steel) Max. Temp. 248°F / 120°C	G2 (Magnetic Differential Manometer w/alarm)	D6 (Automatic condensate drain)		
		4			G3 (Differential Pressure Drop Indicator)	D7 (Electronic condensate drain)		
		5						
		6 ... 12						

Use this table to find your filter model.

XT INLINE FILTER

XT FILTER MODEL	Inlet/Outlet Connection 150#flg	Drain Connection NPT (inches)	AIR FLOW CAPACITY ¹		DIMENSIONS								MASS		Filter Element Quantity / Type
					A		B		C		D		lbs	kgs	
					inches	mm	inches	mm	inches	mm	inches	mm			
1	2	½	850	1364	15	381	47 ¾	1216	26	216	26	660	120	54	1 x XE307
2	3	½	1400	2247	17	432	49 ½	1248	26	222	26	660	176	80	1 x XE507
3	4	½	1700	2729	20	508	52 ½	1337	26	251	26	660	238	108	2 x XE307
4	4	½	2550	4093	20	508	52 ½	1337	26	251	26	660	242	110	3 x XE307
5	6	½	3400	5457	25	635	57 ¾	1457	26	298	26	660	330	150	4 x XE307
6	6	1	4260	6837	31	787	59 ¼	1505	26	356	26	660	42	205	5 x XE307
7	6	1	5120	8218	31	787	59 ¼	1505	26	356	26	660	456	207	6 x XE307
8	8	1	6800	10914	31	787	62 ¼	1581	24	368	24	610	511	232	8 x XE307
9	8	1	8530	13690	33	838	62 ¾	1584	24	368	24	610	794	360	10 x XE307
10	10	1	10240	16435	37	940	67 ¾	1721	28	457	28	711	992	450	12 x XE307
11	10	1	13650	21908	37	940	67 ¾	1721	28	457	28	711	1036	470	16 x XE307
12	12	1	17050	27365	37	940	65 ¾	1673	28	457	28	711	1168	530	20 x XE307

¹flow capacity refers to 1 bar(a) and 68°F/20°C at 100 psig/7 barg.

XZ FREE STANDING FILTER

XZ FILTER MODEL	Inlet/Outlet Connection 150#flg	Drain Connection NPT (inches)	AIR FLOW CAPACITY ¹		DIMENSIONS								MASS		Filter Element Quantity / Type
					A		B		C		D		lbs	kgs	
					inches	mm	inches	mm	inches	mm	inches	mm			
1	2	½	850	1364	8	202	57 ¾	1457	50 ¾	1280	6	152	120	54	1 x XE307
2	3	½	1400	2247	9	229	61 ½	1562	54 ½	1384	6	152	176	80	1 x XE507
3	4	½	1700	2729	10	254	67 ¼	1708	56 ¾	1438	6	152	238	108	2 x XE307
4	4	½	2550	4093	10	254	67 ¼	1708	56 ¾	1438	6	152	242	110	3 x XE307
5	6	½	3400	5457	13	330	73 ½	1867	60 ¾	1546	8	203	330	150	4 x XE307
6	6	1	4260	6837	13	330	73 ½	1867	60 ¾	1546	8	203	42	205	5 x XE307
7	6	1	5120	8218	13	330	73 ½	1867	60 ¾	1546	8	203	456	207	6 x XE307
8	8	1	6800	10914	16	406	80 ½	2045	66 ½	1689	8	203	511	232	8 x XE307
9	8	1	8530	13690	16	406	80 ½	2045	66 ½	1689	8	203	794	360	10 x XE307
10	10	1	10240	16435	C/X ²		C/X ²		C/X ²				992	450	12 x XE307
11	10	1	13650	21908	C/X ²		C/X ²		C/X ²				1036	470	16 x XE307
12	12	1	17050	27365	C/X ²		C/X ²		C/X ²				1168	530	20 x XE307

¹flow capacity refers to 1 bar(a) and 68°F/20°C at 100 psig/7 barg. ²Consult Xebec.



Flow Correction Factors

To select the right filter use the following formulas and the nominal flow figures from the filter model table:

For calculating Actual Flow Capacity: $V_a = V_n \cdot C_{fp}$

For calculating Nominal Flow Capacity: $V_n = V_a / C_{fp}$

Operating Pressure

psig	15	30	45	58	73	87	100	116	130	145	160	176	188	203	218	232	247	260
barg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
C _{fp}	0.25	0.38	0.50	0.65	0.75	0.88	1.00	1.13	1.25	1.38	1.50	1.63	1.75	1.88	2.00	2.13	2.25	2.38

XW SERIES

WATER SEPARATOR

Pressure	260 psig / 18 barg
Volume Flow Range	1700 to 10080 scfm / 2880 to 17280 Nm³/h
Port Size	2" to 10" Class 150 Flange

BENEFITS:

- 99% efficiency
- Maintenance-free
- High flow rates
- Very low differential pressure
- Removes upstream rust and pipe scale

Remove bulk water from your compressed air system

Bulk water in compressed air systems causes corrosion of piping, damage to valves, cylinders, pneumatic tools and machinery, and reduces the effectiveness of aftercoolers/heat exchangers. Over 99% of bulk water can be easily and economically removed by installing an XWS Water Separator. Your system will operate much more efficiently with reduced downtime and maintenance costs, and improved effectiveness of aftercoolers, refrigerant dryers, filters and other downstream equipment.



To Order Your Water Separator

ORDERING EXAMPLE: **XWSA 3 N**

XEBEC	Series	Application	WS Model	Condensate Drain
X	WS (Water Separator)	A (Air)	1	N (None) Default
			2	D3 (Manual Ball Valve)
			3	
			4	
			5	

Air System Water Separator, 10" flange connection flow, 100,800 scfm

Use this table to find your filter model.

Water Separator Model	Inlet/Outlet Connection 150# Flg	Drain Connection NPT	Air Flow Capacity ¹		DIMENSIONS						MASS	
					A		B		C			
			scfm	Nm ³ /hr	in	mm	in	mm	in	mm	lbs	kgs
1	3	1	1700	2880	15	381	47 7/8	1216	26	216	120	54
2	4	1	2100	3600	17	432	49 1/8	1248	26	222	176	80
3	6	1	3780	6480	20	508	52 3/8	1337	26	251	238	108
4	8	1	6300	10800	20	508	52 3/8	1337	26	251	242	110
5	10	1	10080	17280	25	635	57 3/8	1457	26	298	330	150

¹flow capacity refers to 1 bar(a) and 68°F/20°C at 100 psig/7 barg.



Flow Correction Factors

To select the right filter use the following formulas and the nominal flow figures from the filter model table:

For calculating Actual Flow Capacity: $V_a = V_n * C_{fp}$

For calculating Nominal Flow Capacity: $V_n = V_a / C_{fp}$

Operating Pressure

psig	15	45	73	100	130	160	188	218	247
barg	1	3	5	7	9	11	13	15	17
C _{fp}	0.50	0.70	0.87	1.00	1.12	1.22	1.32	1.41	1.50

X SERIES

ACCESSORIES



G1/G2

Name	G1 Magnetic Pressure Drop Indicator Differential Manometer G2 With voltage-free REED contact version for remote alarm
Technical Data	Max. Pressure: 232 psig / 16 barg Max. Temperature: 150°F / 65°C
For Use With	XL, XT, XZ



G3

Name	Differential Pressure Drop Indicator Aluminum Alloy Housing
Technical Data	Max. Pressure: 290 psig / 20 barg Max. Temperature: 150°F / 65°C
For Use With	XL, XT, XZ



D1

Name	Manual Valve Condensate Drain Stainless Steel
Technical Data	Max. Pressure: 290 psig / 20 barg Max. Temperature: 176°F / 80°C
For Use With	XL



D3

Name	Manual Ball Valve Condensate Drain
Technical Data	Max. Pressure: 725 psig / 50 barg Max. Temperature: 176°F / 80°C
For Use With	XL, XM, XT, XZ, XWS



D4

Name	Manual Needle Valve Condensate Drain
Technical Data	Max. Pressure: 6000 psig / 420 barg Max. Temperature: 176°F / 80°C
For Use With	XH



D5

Name	Automatic Float Drain Valve
Technical Data	Max. Press: 232 psig / 16 barg Max. Temp: 122°F / 50°C
For Use With	XL



D6

Name	Automatic Condensate Drain
Technical Data	Max. Pressure: 290 psig / 20 barg Max. Temperature: 149°F / 65°C
For Use With	XL, XT, XZ



D7

Name	Electronic Condensate Drain
Technical Data	Max. Pressure: 232 psig / 16 barg Max. Temperature: 149°F / 65°C
For Use With	XL, XT, XZ



I1

Name	Oil Indicator
Technical Data	Max. Pressure: 232 psig / 16 barg Max. Temperature: 122°F / 50°C
For Use With	XL

Ask us about other available accessories.

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Whatever you need for your air and gas dehydration and filtration, Xebec can offer a solution. 50 years of experience speak to our solid track record of completing countless projects successfully. By keeping virtually all stages of production in-house, there are practically no limits to what we can achieve. Talk to us about solutions that work for your business.



Committed to first class customer service.

Xebec stands behind the service, spare parts and technical support needed to ensure the most complete and effective solution for every installation throughout the world.

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